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FAIRCHILD SEMICONDUCTOR®

February 2007

FSA2380 — Low R_{ON} (0.75Ω) 3:1 Negative Swing Audio Source Switch

Features

- 10µA Maximum I_{CCT} Current Over An Expanded Control Voltage Range (V_{IN}=2.6V, V_{CC}=4.3V)
- C_{ON} Capacitance 70pF Typical
- 0.75Ω Typical On Resistance (R_{ON})
- 1Bn, 2Bn Ports Support Negative Swing Audio to -2V
- -3db Bandwidth: > 120 MHz
- Low Power Consumption (1µA maximum)
- Power-Off Feature for 1A/2A Pin (I_{IN} < 2µA)
- Packaged in Pb-Free 14-Pin TSSOP and DQFN

Applications

- Cell Phone, PDA, Digital Camera, and Notebook
- LCD Monitor, TV, and Set-Top Box

Description

The FSA2380 is a Double-Pole, Triple Throw (DP3T) multiplexer that routes three dual-channel sources of data or audio under the control of a single pair of select pins. The FSA2380 has special circuitry on the 1A/2A pins to allow a power-off feature. With the V_{CC} supply removed and voltage on the 1A/2A pins, there is minimal leakage current into the 1A/2A data pins. The FSA2380 also features very low quiescent current and a power-off feature to extend battery life. The low quiescent current feature allows mobile handset applications direct interface with the baseband processor general-purpose I/Os. Typical applications involve switching in portables and consumer applications, such as cell phones, digital cameras, and notebooks with hubs or controllers.

IMPORTANT NOTE:

For additional performance information, please contact analogswitch@fairchildsemi.com.

Ordering Information

Part Number	Top Mark	Pb-Free	Packing Description
FSA2380BQX	2380	Yes	14-Terminal Depopulated very thin Quad Flat-pack No leads (DQFN) 2.5 x 3.0mm, JEDEC MO-241
FSA2380MTCX	FSA2380	Yes	14-Lead Thin Shrink Small Outline Package (TSSOP) 4.4mm wide, JEDEC MO-153

Analog Symbol

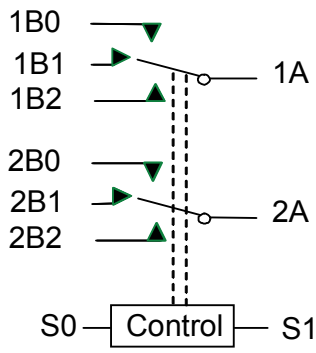

Figure 1. FSA2380 Analog Symbol

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SuperFET™
SuperSOT™-3
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Definition of Terms

Datasheet Identification	Product Status	Definition
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